10

15

## CLAIMS

- method for revamping a combined system consisting of a blast furnace supplied with oxidizing fluid issuing at least partially from an air separation unit (ASU), characterized in that more than 50% of the flow from the blower feeding the blast furnace before revamping is injected into a cryogenic air gas separation unit in order to produce oxygen with a purity above 90% by volume of O2 fed to the blast furnace, the blower air flow rate and/or pressure of the air issuing from the blower being controlled by a controller which measures this flow rate pressure at the inlet and/or outlet of the air cleaning stage, placed upstream of the separation unit, in order to control the flow rate or pressure of the air issuing from the blower, the blast furnace feed consisting of pure oxygen or oxygen diluted with air produced by the cryogenic separation unit.
- 2. The method as claimed in claim 1, characterized in that the blower flow rate is controlled by a controller of which the setpoint is calculated from the flow rate and/or pressure characteristics of at least one of the fluids produced by the ASU.
- 25 3. The method as claimed in either of claims 1 and 2, characterized in that the air issuing from the blower is cooled to a temperature below 50°C before being recompressed in a second compressor.
- 4. The method as claimed in one of the preceding claims, characterized in that the blower is controlled using a FIC controller of which the measurement and setpoint derive from one of the fluids produced by the ASU.
- 5. The method as claimed in one of claims 1 to 3,
  35 characterized in that the blower is controlled by a PIC controller of which the flow rate or pressure measurement and of which the setpoint value are

determined from the fluid entering the second compressor.

6. The method as claimed in one of claims 3 to 5, characterized in that the second compressor is controlled by a FIC controller, the measured parameters and setpoint issuing from the flow rate and/or pressure measurement of the ASU.

5